## REMARKS

The present Amendment is in response to the Examiner's Final Office Action mailed June 27, 2008 and Advisory Action mailed August 14, 2008. A Request for Continued Examination has been submitted herewith. Claim 13 is amended and claim 23 is added. Claims 8-11 and 13-23 are now pending. Reconsideration of the application is respectfully requested in view of the above amendments to the claims and the following remarks. For the Examiner's convenience and reference, Applicants' remarks are presented in the order in which the corresponding issues were raised in the Office Action.

Please note that the following remarks are not intended to be an exhaustive enumeration of the distinctions between any cited references and the claimed invention. Rather, the distinctions identified and discussed below are presented solely by way of example to illustrate some of the differences between the claimed invention and the cited references. In addition, Applicants request that the Examiner carefully review any references discussed below to ensure that Applicants' understanding and discussion of the references, if any, is consistent with the Examiner's understanding.

### Interview Summary

On August 21, 2008, Applicant transmitted amended claim 13 and new claim 23 to the Examiner. The Examiner indicated that these claims distinguished over the prior art of record.

### Rejection Under 35 U.S.C. § 103

The Examiner rejects claims 8-11 and 13-22 under 35 U.S.C. § 103 as being unpatentable over U.S. Publication No. 2003/0193974 of *Frankel et al.* (*Frankel*). Applicants traverse the Examiner's rejection for obviousness on the grounds that the cited reference fails to teach or suggest each and every element of the rejected claims.

*Frankel* teaches an external cavity laser wherein light from lasers 12a-12c is incident on a grating 24, which reflects the light to a partially reflective mirror 15. See Figure 2. In the embodiment of Figure 2, an etalon 26 is positioned between the mirror 15 and the grating 24.

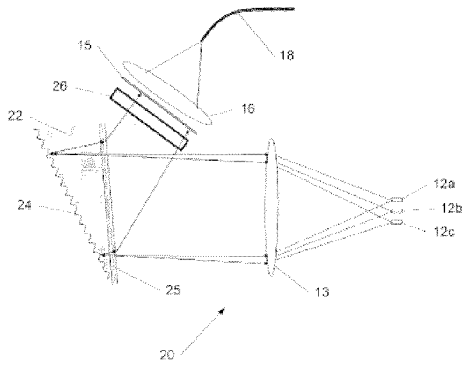


FIG. 2

The function of the etalon 26 is to "narrow the linewidth and stabilize the emission wavelength." Paragraph 24. "Linewidth" refers to the band of frequencies emitted by a laser. Accordingly, the function of the etalon in narrowing the linewidth refers to its function as a bandpass filter. An etalon is defined as "a device used in spectroscopy to measure wavelengths by interference effects produced by multiple reflections between parallel half-silvered glass or quartz plates." Collins English Dictionary. In the context of *Frankel*, the interference effects produce a device that transmits only at specific frequencies, e.g., "a fixed wavelength spacing, corresponding for example to the ITU grid…" Paragraph 24.

In contrast claim 8 recites, in combination with other elements, a plurality of tunable lasers, "a grating for receiving the light from each of the spatially offset tunable lasers…," a first thermo-optic prism positioned between the plurality of tunable lasers and the grating…," and "a second prism positioned between the first thermo-optic prism and the grating, *the second prism arranged to correct an aberration introduced by the first thermo-optic prism in order to restore the quality and shape of the light from each of the spatially offset tunable lasers*."

The etalon 26 of *Frankel* is not a prism. Prisms are optical components that refract light and emit a beam in which different wavelengths of light are angularly shifted from one another. The etalon 26 does not perform this function in the device of *Frankel* and there is no teaching or suggestion of why or how the etalon 26 would perform this function. As noted previously, the etalon 26 functions only as a filter for narrowing the linewidth and stabilizing the emission wavelength.

The etalon 26 further does not correct for any aberration introduced by any other component of the apparatus of *Frankel*. Claim 8 recites that "the second prism [is] arranged to

correct an aberration introduced by the first thermo-optic prism in order to *restore the quality and shape of the light from each of the spatially offset tunable lasers*."

The etalon functions to improve the quality of the output of the laser but does not reverse an aberration that is induced in the output of lasers by another component. The improvement caused by the etalon 26 relates to the beam originally generated by the lasers 12a-12c. The etalon 26 is described as narrowing the linewidth and stabilizing the emission wavelength. The linewidth and emission wavelength are properties of beams emitted from the lasers. The emersion grating 24, for example, is a passive element that cannot introduce wavelengths into a beam of light such that it widens the linewidth or destabilizes the wavelength of the laser. Only the active gain sections of the lasers 12a-12c emit light having a range of wavelengths. The etalon 26 therefore does not reverse an aberration caused by the emersion grating 24, but rather further improves the quality of the original beam.

With respect to claim 13, for the above noted reasons, *Frankel* does not teach or suggest, in combination with the other elements of the claim, a grating, a first thermo-optic prism, and "a second prism positioned after the grating and arranged to *correct an aberration introduced by the first thermo-optic prism* in order to restore the quality and shape of the light from each of the spatially offset tunable lasers."

*Frankel* further does not teach or suggest, in combination with the other elements of the claim "a first thermo-optic prism … [and] a second prism … wherein the first and second prism each have a triangle shape including first and second faces that are angled with respect to one another, *wherein the first face of the first prism is parallel the first face of the first prism and wherein the second face of the first prism is parallel to the second face of the second prism*."

The etalon 26 of *Frankel* is not a prism and is further not a triangularly shaped prism. Etalons 26 are formed by partially reflective plates separated by an air, or some other, gap. The etalon 26 therefore does not include a triangular prism and further would not properly function as an etalon were it formed using triangular prisms.

Claims 9-11 and 14-22 depend on claims 8 and 13, respectively, and are therefore allowable for at least the reasons discussed hereinabove.

## CONCLUSION

In view of the foregoing, Applicants believe the claims as amended are in allowable form. In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, or which may be overcome by an Examiner's Amendment, the Examiner is requested to contact the undersigned attorney.

The Commissioner is hereby authorized to charge payment of any of the following fees that may be applicable to this communication, or credit any overpayment, to **Deposit Account No. 23-3178**: (1) any filing fees required under 37 CFR § 1.16; and/or (2) any patent application and reexamination processing fees under 37 CFR § 1.17.

Dated this 27th day of August, 2008.

Respectfully submitted,

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